Pennsylvania Institute of Technology

Why Choose P.I.T. for your Computer-Aided Design Engineering (CAD) degree?

✓ **Intimate Learning Environment and Family Atmosphere**

✓ **Learn at Your Own Pace with eLearning at P.I.T.**

✓ **Free Tutoring**

✓ **Experienced Instructors**

✓ **Portfolio Building and Interview Coaching**

A.S. Computer-Aided Design Engineering (CAD)

Enter into the world of digital engineering and design as a CAD specialist.

Achieve your goals quickly! In under two years, you can earn your college degree with our FLEXIBLE term scheduling.

What is a Computer-Aided Design (CAD) Engineer?

The CAD program emphasizes architectural, civil and mechanical design. CAD specialists prepare detailed drawings of buildings and other structures. Graduates may specialize in a type of structure, such as commercial or residential, or a type of material, such as timber or reinforced concrete. Graduates interested in mechanical design prepare detailed diagrams of machinery and mechanical devices. Graduates also prepare and provide instructions regarding the fabrication, assembly, and use of mechanical equipment, parts, and devices.

What kind of career can I expect?

CAD graduates generally work in an office at a computer work station. Employers include architectural, engineering, and construction firms in manufacturing industries. Entry-level job titles include:

- CAD Operator
- CAD Designer
- CAD Specialist
- Architectural/Civil Drafter

Career potential includes positions such as:

- CAD Manager
- Lead Design Drafter

Where can I go after earning my degree at P.I.T.?

Program graduates who choose to further their education may transfer to a bachelor's degree program. Graduates of the A.S. in CAD program may sit for the *ADDA (American Design Drafting Association) Drafter Certification Examination.*

COMPUTER-AIDED DESIGN ENGINEERING (BME)
Associate in Science A.S.
Recommended Course Sequence

Code	Course (Credits)
EGR 138	Engineering Graphic Design (3)
EGR 198	Computer-Aided Design CAD I (3)
SIT 203	Basic Office Software Applications (3)
EGR 278	Computer-Aided Design CAD II (3)
ENG 108	English Composition (3)
MTH 145	College Algebra and Trigonometry (3)
EGR 108	Mechanical Graphic Design I (3)
HUM 140	Critical Thinking in the Modern Age (3)
MTH 225	Calculus I (4)
EGR 124	Architectural Graphic Design I (3)
ENG 215	Analytical Writing (3)
STR 134	Engineering Mechanics (3)
EGR 113	Mechanical Graphic Design II (3)
EGR 126	Architectural Graphic Design II (3)
COM 108	Communications and Social Interaction (3)
EGR 212	Revit® (3)
EGR 145	Electronic Graphic Design (3)
PSY 105	Introduction to Psychology (3)
EGR 252	Inventor (3)
EGR 365	CAD Engineering Co-Op or (3)
OR	
_____	Free Elective (3)

PROGRAM TOTAL: 61

*Prerequisite coursework is required.

NOTE: Additional course(s) may be required based on the results of a placement test.

Course Highlights

EGR 108—Mechanical Graphic Design
Students gain an understanding for standard machining processes and specific manufacturing tools, demonstrate the ability to utilize geometric tolerance dimensioning, the American National Standard Institute for machine processes, and demonstrate the ability to read and understand processes and symbols.

ENR 124—Architectural Graphic Design I
Students learn procedures/materials that are used for the Standard Principles of Residential Construction Systems; demonstrate the ability to design and draft various foundation systems; show the ability to design and draft floor, wall, and roof-framing systems; utilize standard applications and procedures used for "AutoCAD Architectural."

ENG 365–CAD Engineering CO-OP
Students are placed in workplaces in the region assisting professionals with CAD engineering projects. Students will demonstrate the knowledge acquired in the CAD Engineering program by completing CAD assignments. Placement at CAD-related workplaces is only available during the day. Students have the option of substituting a free elective course in place of this course.

TUITION INFORMATION

Number of Terms in Program
Traditional – 7 Terms

Academic or Certification Achievement
Associate Degree for transfer to university or for employment

Tuition and Fees for Associate Degree Programs
- Tuition: $390 per credit, plus tech fees
- Graduation Fee: $100
- May exclude books and supplies, course or program fees.
  *A detailed breakdown may be obtained in the financial aid office.